MINI PROJECT REPORT ON

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Under the Guidance of
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➢ INTRODUCTION :

We developed this project to book a car on rent *at* the fare charges. In present system all booking work done manually and it takes very hard work to maintain the information of booking and cars. If you want to find which vehicle is available for booking then it takes a lot of time. It only makes the process more difficult and harder. This aim of the project is to automate the work performed in the car rental management system like generating daily bookings, records of car or cab available for booking, record of routes available, rental charges for cars for every rout, store record of the customer.

Car rental management system is a car booking software that provides a complete solution to all your day-to-day car booking office running needs. This system helps you to keep the information of Customer online. You can check your customer information any time by using this system. Cab rental management system is a unique and innovative product. Using this this you can also keep the information of number of bookings in current month or in last 6 month or in last year. This helps you to track your business and you earning in particular month or in any year. Based on this information you can take decision regarding your business development.

• Problem Statement :

A car rental is a vehicle that can be used temporarily for a fee during a specified period. Getting a rental car helps people get around despite the fact they do not have access to their own personal vehicle or don't own a vehicle at all. The individual who needs a car must contact a rental car company and contract out for a vehicle. This system increases customer retention and simplify vehicle and staff management.

Objectives :

- To produce a web-based system that allow customer to register and reserve car online and for the company to effectively manage their car rental business.
- To ease customer's task whenever they need to rent a car.
- It is a system design specially for large, premium and small car rental business. The car rental system provides complete functionality of listing and booking car.

➢ Scope :

This project traverses a lot of areas ranging from business concept to computing field, and required to perform several researches to be able to achieve the project objectives. The area covers include:

- Car rental industry: This includes study on how the car rental business is being done, process involved and opportunity that exist for improvement.
- Java Technology used for the development of the application.
- General customers as well as the company's staff will be able to use the system effectively.
- Web-platform means that the system will be available for access 24/7 except when there is a temporary server issue which is expected to be minimal.

➢ Overall Description

➢ Existing system function:

A car rental is a vehicle that can be used temporarily for a period of time with a fee. Renting a car assists people to get around even when they do not have access to their own personal vehicle or don't own a vehicle at all. The individual who want to rent a car must first contact the car rental company for the desire vehicle. This can be done online. At this point, this person has to supply some information such as; dates of rental, and type of car. After these details are worked out, the individual renting the car must present a valid Identification Card. Most companies throughout the industry make a profit based on the type of cars that are rented.

The rental cars are categorized into economy, compact, compact premium, premium and luxury. And customers are free to choose any car of their choice based on their purse and availability of such car at the time of reservation. Car Rental System gives car rental service for both foreign and local customers.

This organization carries out its daily work by providing their service to the customers using manually system. The organization uses a manual system for reserving, renting, register and to keep record of all the

rental activities and customer information. The detailed existing system functions are listed as follows. During car reservation the customers reserve a vehicle by making a phone call to the organization; otherwise he/she is expected to go to the organization to make reservation.

During renting a car the customer personal information, payments status and rent agreements are filled in the car rent agreement form in order to hold legal contract between the customer and organization for renting the vehicle.

The organization normal work time schedule is from therefore the organization gives services for ten and half hours a day. The organization makes a general report about the rented cars once at the end of the month and generates a report**.**

- **Checking For Availability:**

Employee can check for the availability of the car. He/she maintains the database of car. If no any car is available it is the responsibility of the employee to provide alternative options.

- **Payment system:**

Administrator/owner of the applications responsible for payment to the employee. Order cancellation, order finalize, these all activities are done by the administrator of the application**.**

MODULE SPECIFICATION

- Admin : Admin can add a car in system in also fix the rent of a car. Admin can also add customer's.
- Our Car's :User can select or choose their car as per their requirement. Also user can test the car by selecting one of the car View Available Cars: It is a system design specially for large, premium and small car rental business. The user can view Available cars and user can book for that car.
- Booking Car :The user can view Available cars and user can book for that car.
- Easily Get the Car on rent :The Customer can easily get the car whenever they need to on the rent with use of this system.
- Add Car : The Admin can add the car so that The user can see the available cars and book the car.
- Manage Rent: The Admin can manage the rent so that The user can see the rent and book the car.

Users and Characteristics:

- **Admin:**

i. Admin can login to the system.

ii. Verify the car information database.

iii. Generate price strategy.

iv. Handle the payment system.

v. Finalize the order.

vi. Cancel the order.

- **Customer:**

i. Customer can login to the system.

ii. Visit the website.

iii. Check the availability of cars.

iv. Test drive of the car.

v. Place the order.

OTHER PLATFORMS :

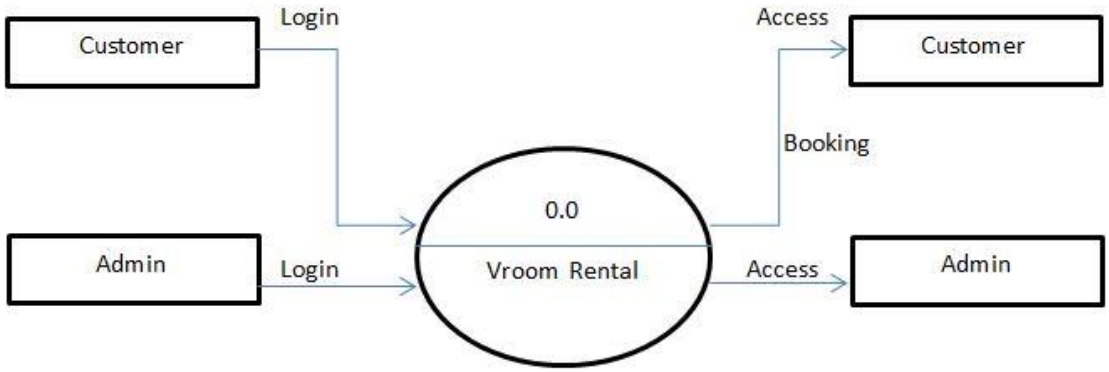
- The user has to go in the office where user can get the car on rent and book their car.
- In the existing system you can not provide feedback of the user to the admin online.

➢ Benefits of Online Car Rental Services :

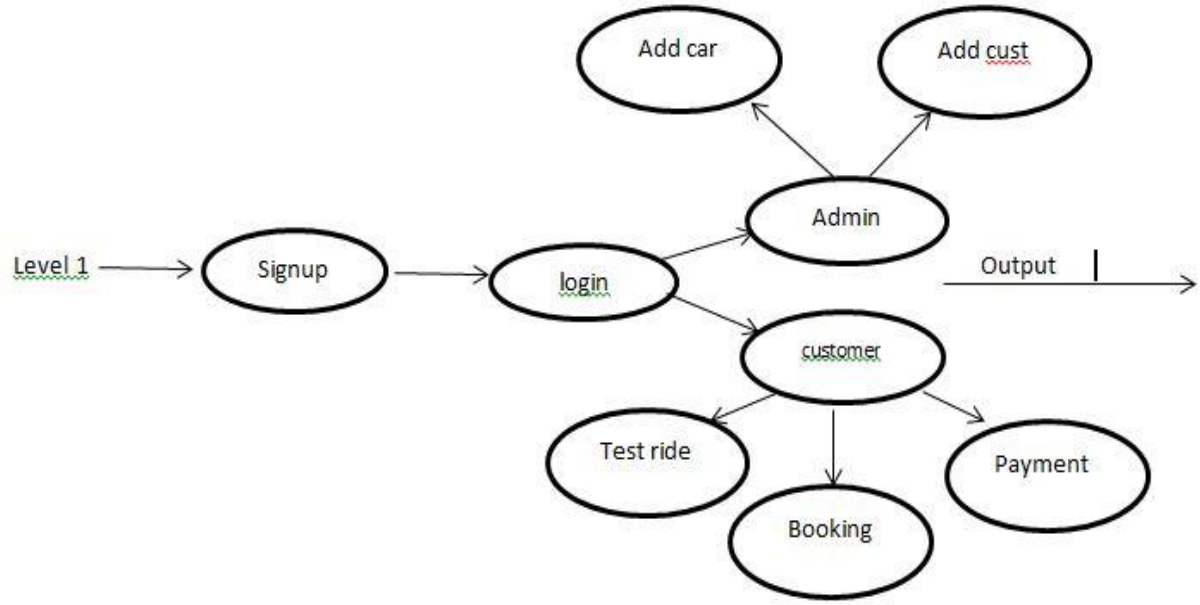
- This online car rental solution is fully functional and flexible.
- It is very easy to use.
- This online car rental system helps in back office administration by streamlining and standardizing the procedures.
- It saves a lot of time, money and labour.
- Eco-friendly: The monitoring of the vehicle activity and the overall business becomes easy and includes the least of paper work.
- The software acts as an office that is open 24/7.
- It increases the efficiency of the management at offering quality services to the customers.
- It provides custom features development and support with the software.

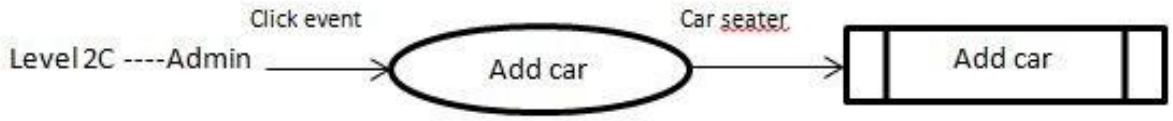
➢ Diagram Specifications :

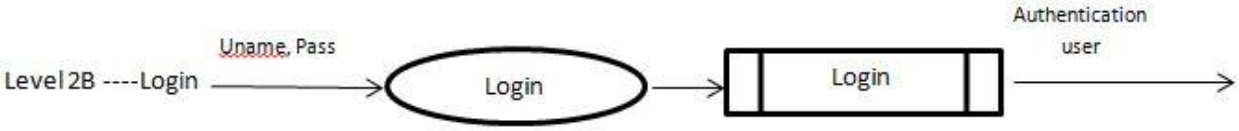
Data Flow Diagram (DFD)

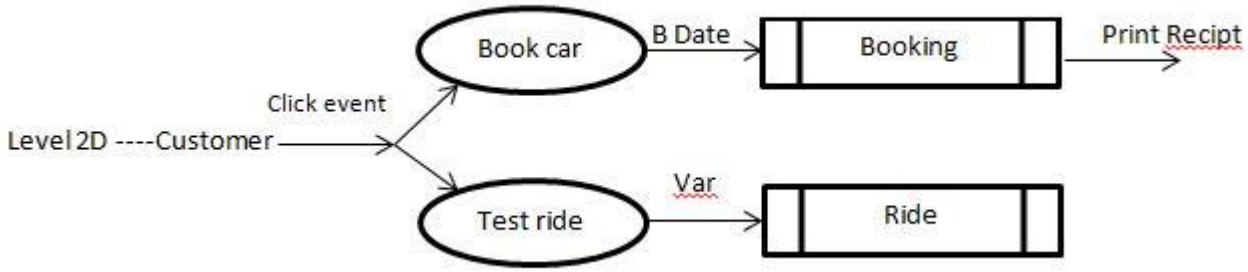


➢ Context level DFD :

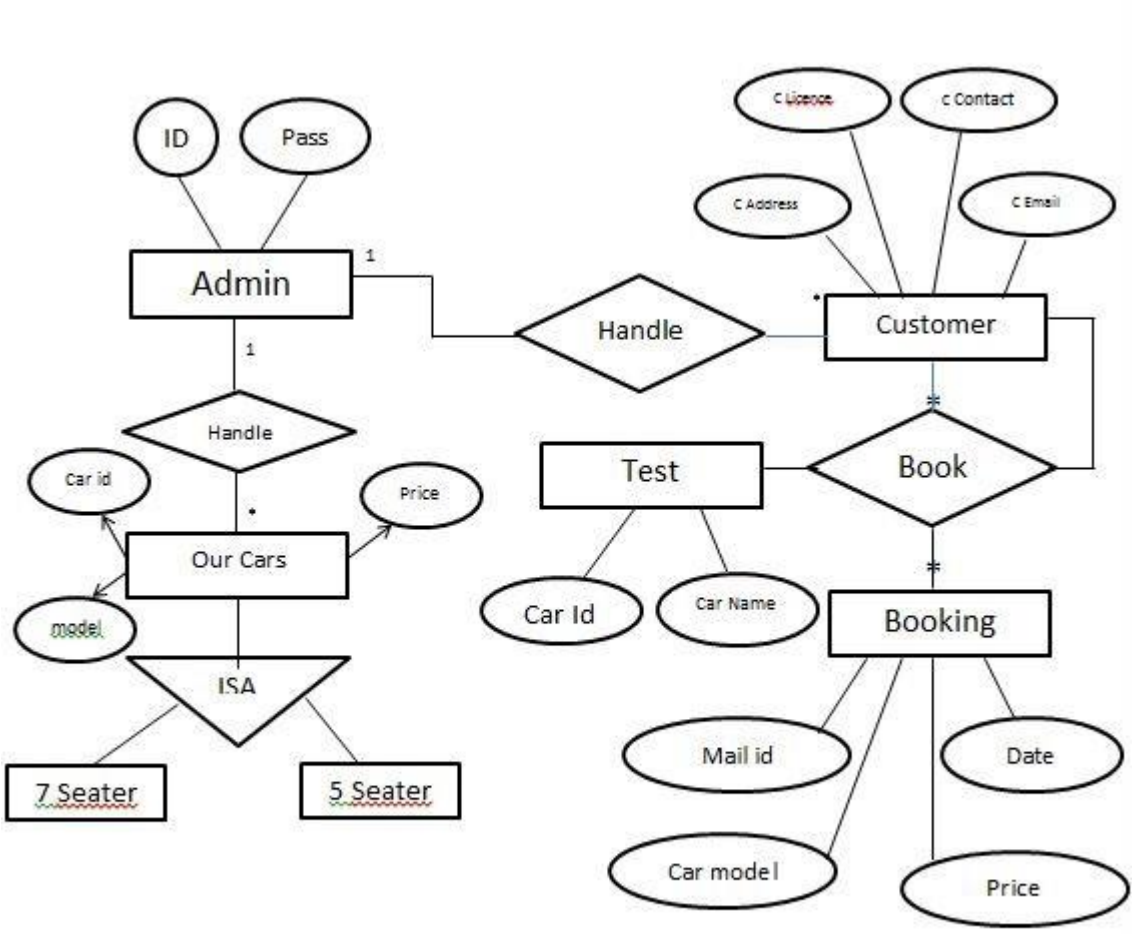



Click event
Level 2C ----Admin
Add car
Car seater
Add car

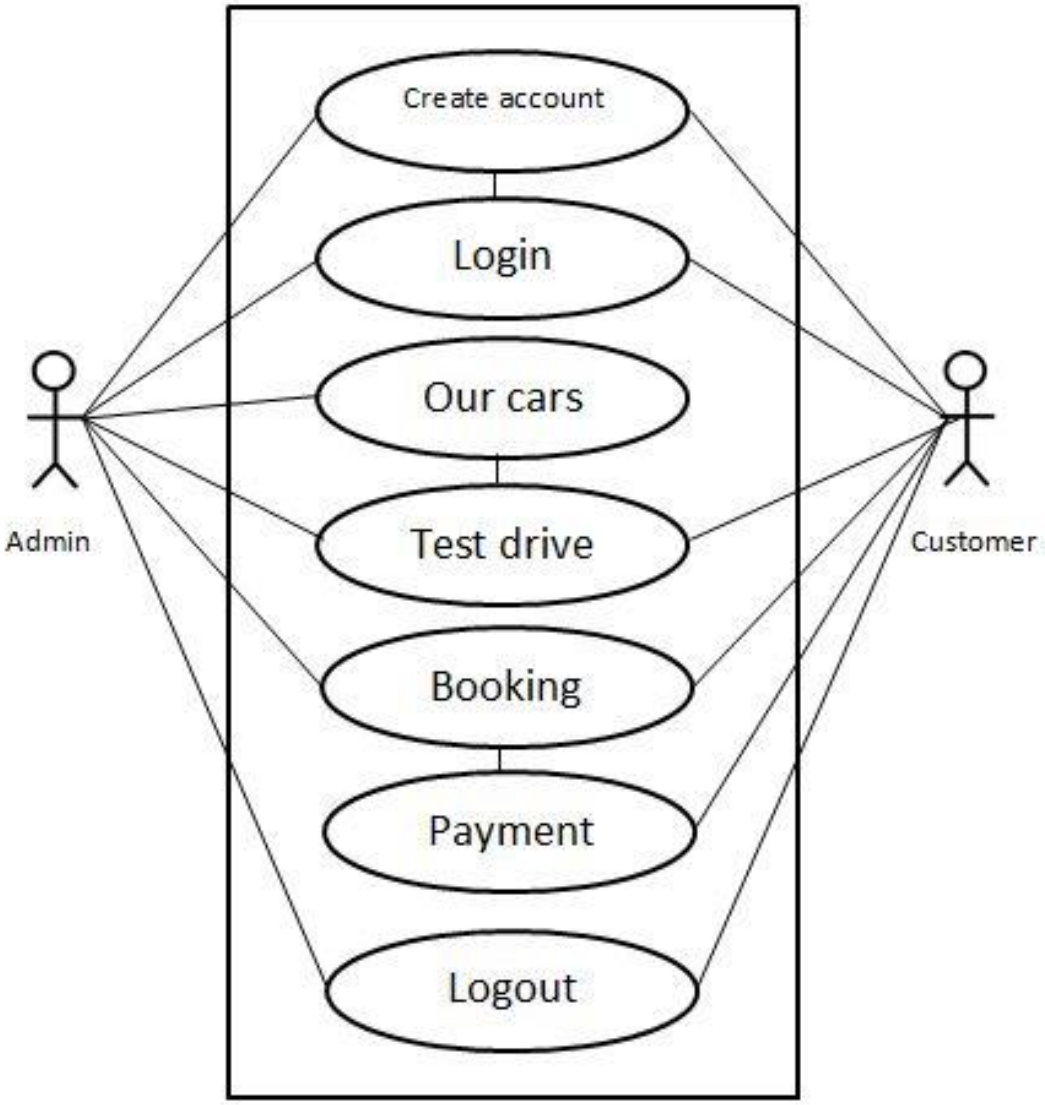

Uname, Pass
Level 2B ----Login
Login
Login
Authentication
user


Book car
B Date
Booking
Print Recipt
Click event
Level 2D ----Customer
Var
Test ride
Ride

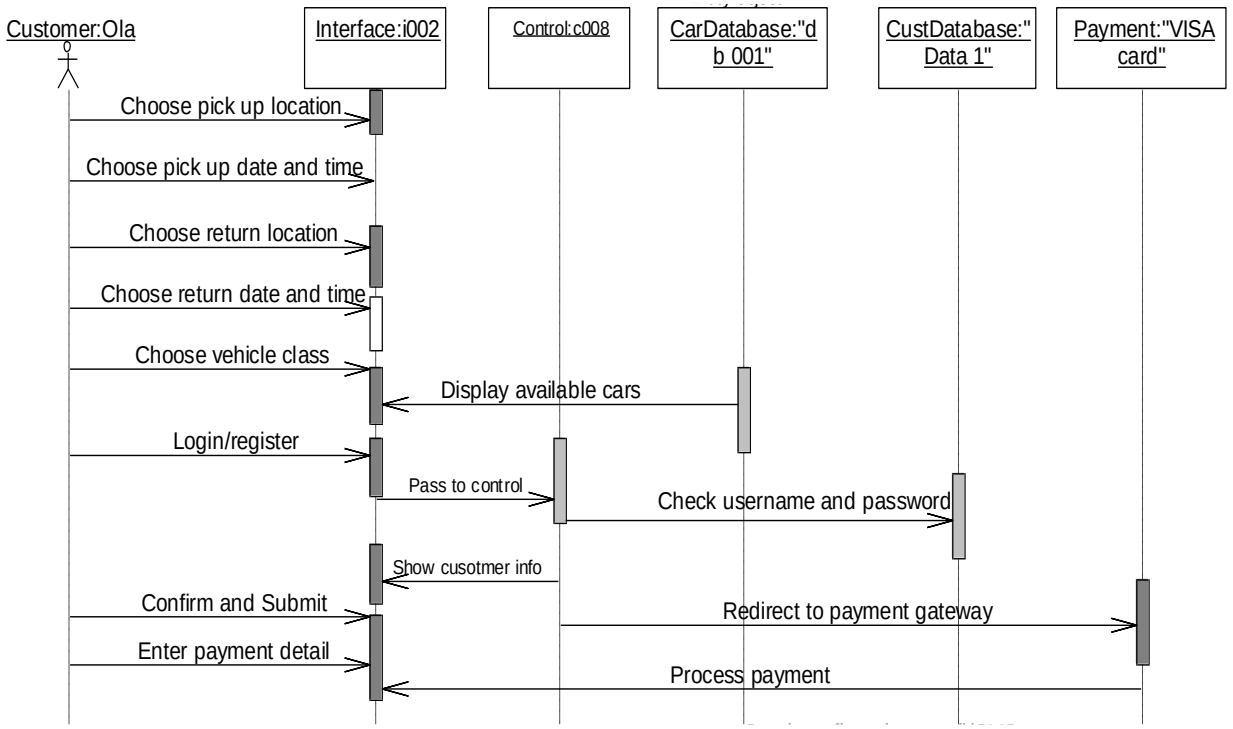
ER Diagram :


ID
Pass
Admin
1
1
Handle
Car id
Price
Our Cars
model
ISA
7 Seater
5 Seater
C Licence
c Contact
C Address
C Email
Handle
Customer
Test
Book
Car Id
Car Name
Booking
Mail id
Date
Car model
Price

Use Case


Create account
Login
Our cars
Test drive
Booking
Payment
Logout
Admin
Customer

➢ SEQUENCE DIAGRAMS :



➢ Table Design

➢ Table : Login

Sr.no	Field Name	Datatype	Size	Constraint
1	ID	Varchar	10	Primary key
2	Pwd	Varchar	8	

➢ Table : Register / Signup:

Sr.no	Field Name	Datatype	Size	Constraint
1	Name	Varchar	10	
2	Email	Varchar	-	
3	Contact	Integer	10	
4	Dl_no	Varchar	16	
5	pwd	Varchar	8	

Table: **Add Car**

Sr.no	Field Name	Datatype	Size	Constraint
1	Car_Name	Varchar	7	
2	Booking_Price	Integer	4	
3	Car_detail	Varchar	10	

Table: Car Booking

Sr.no	Field Name	Datatype	Size	Constraint
1	Email	Varchar		
2	Car_name	Varchar		
3				

Table : Our car

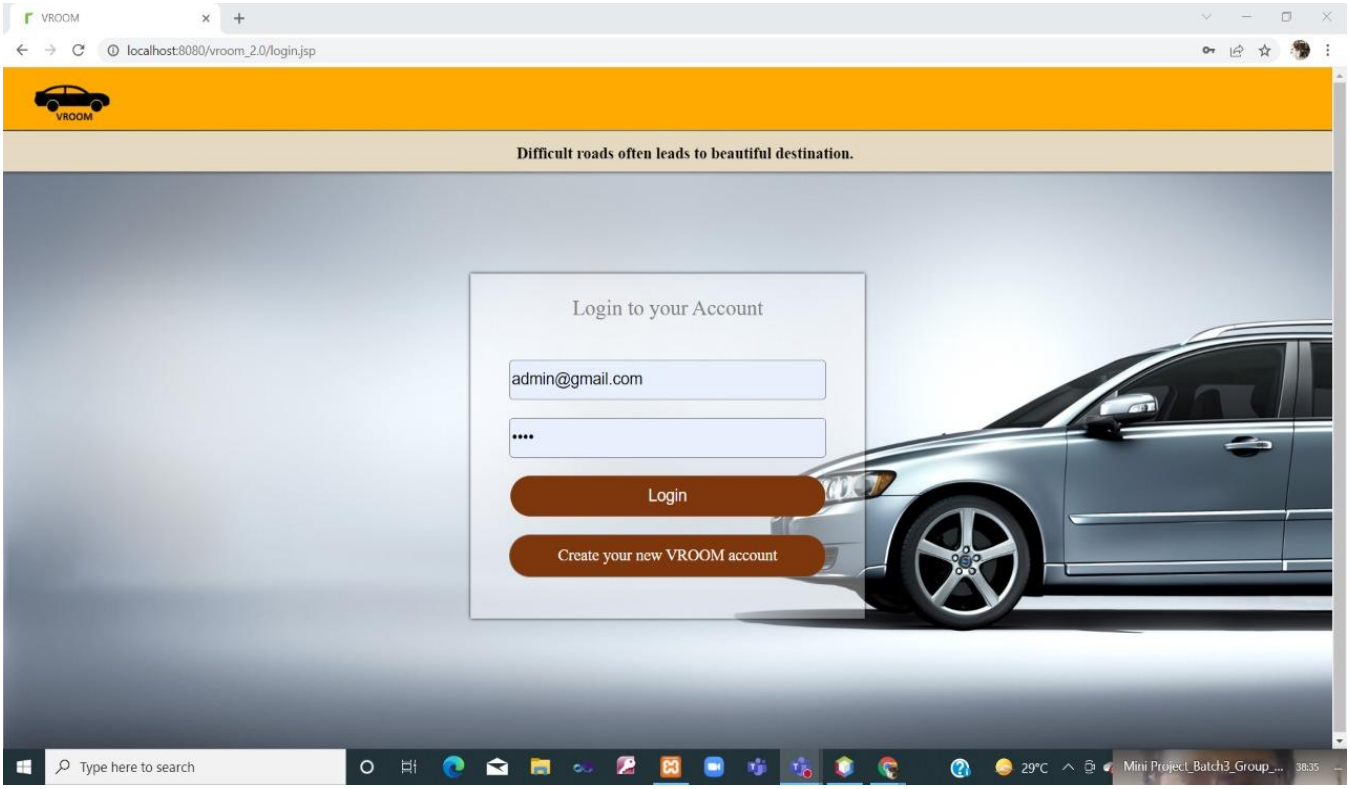
Sr. No.	Field Name	Data type	Size	Constraint
1	Email	Varchar	-	
2	Car_name	Varchar	5	
3	Car_price	Integer	5	
4	Car_details	Varchar	5	
5	Car_type	Varchar	2	

Table : Create A/c through Admin

Sr. No.	Field Name	Data type	Size	Constraint
1	User_name	Varchar	10	
2	DL_no	Varchar	16	
3	Email	Varchar	-	
4	Contact_no	Integer	10	
5	pwd	Varchar	10	

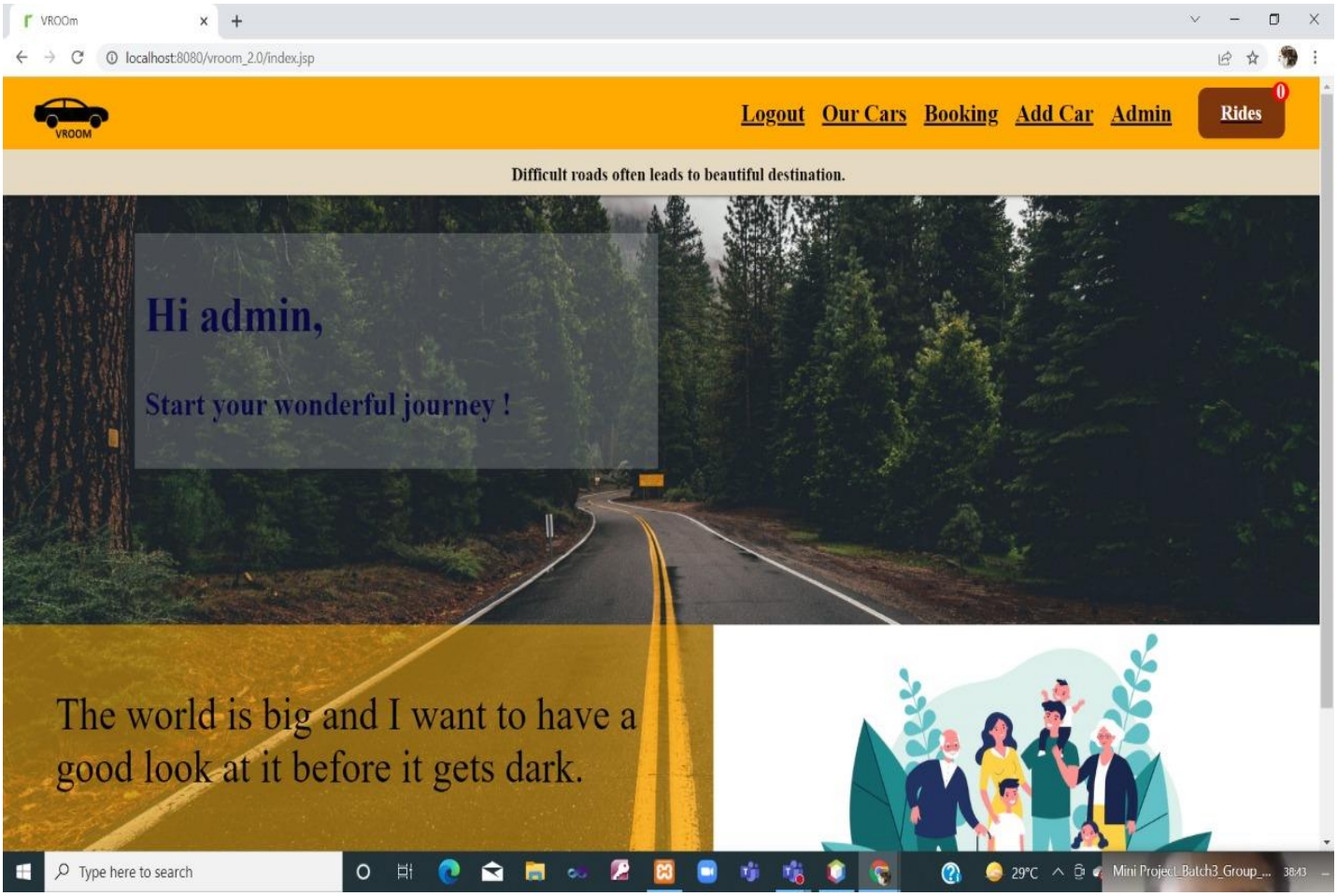
- **Project Screenshots-**

Login Page:-



In this module user and customer can login through entering id and password, if it is exists and if new user trying to register then they have to create account

Dashboard:-



In this dashboard various services in which software had those are the displayed here. These are the different services followed by –

1 Login

2 Our cars

3 Test a ride

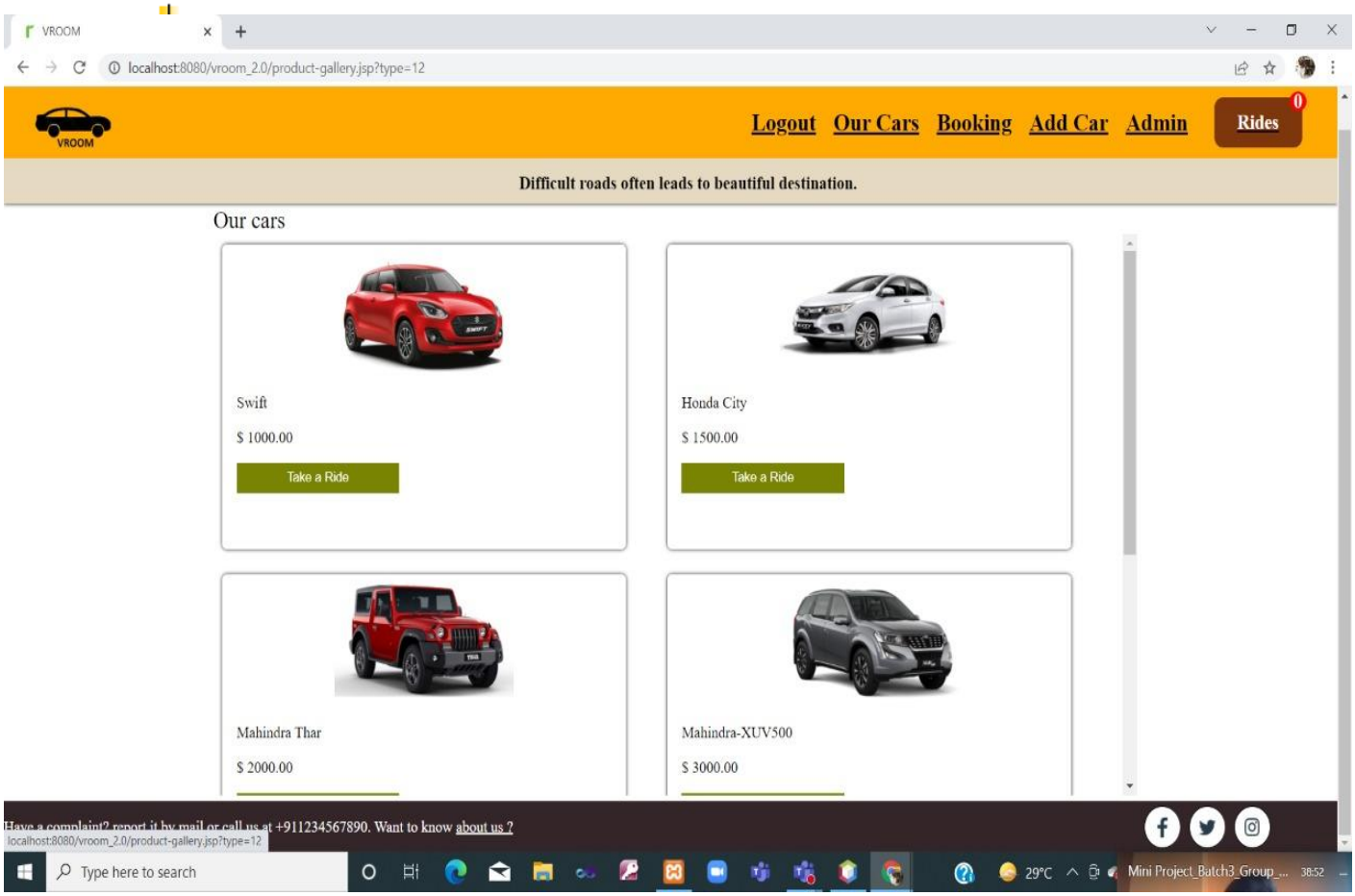
4 Book a car

5 Add car

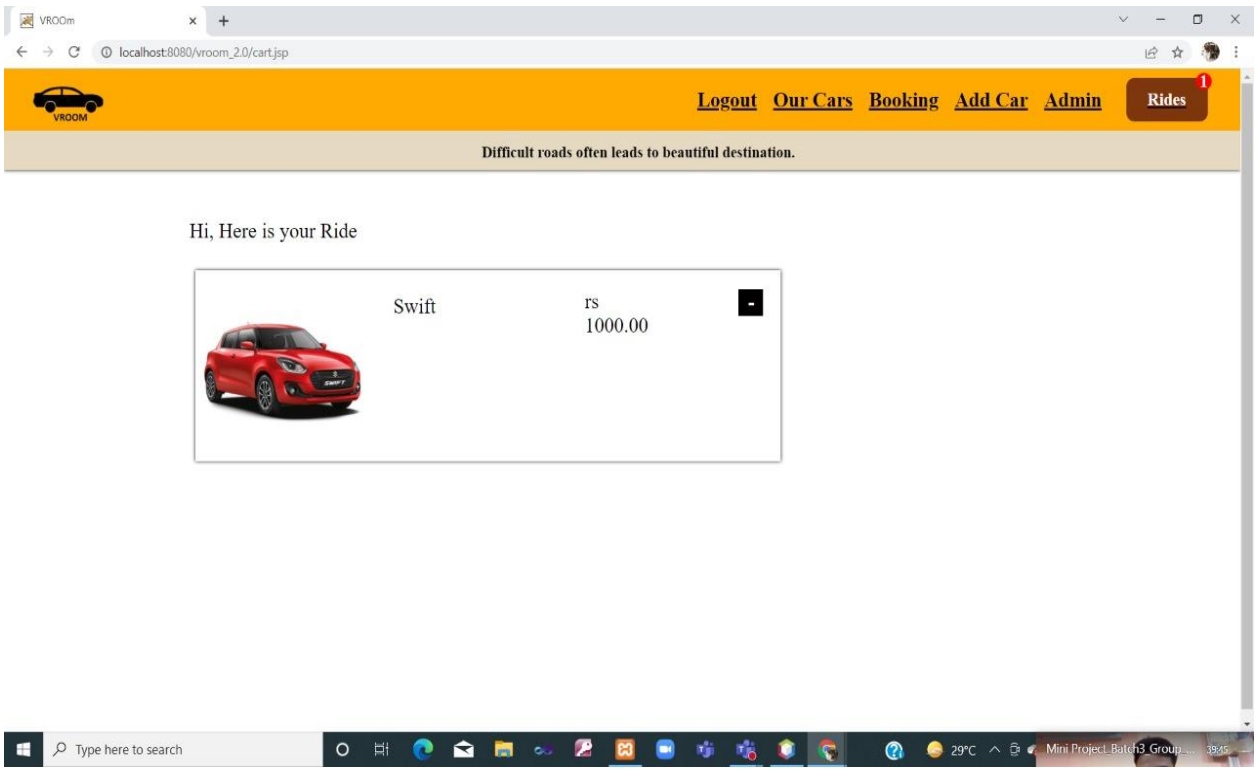
6 Admin section

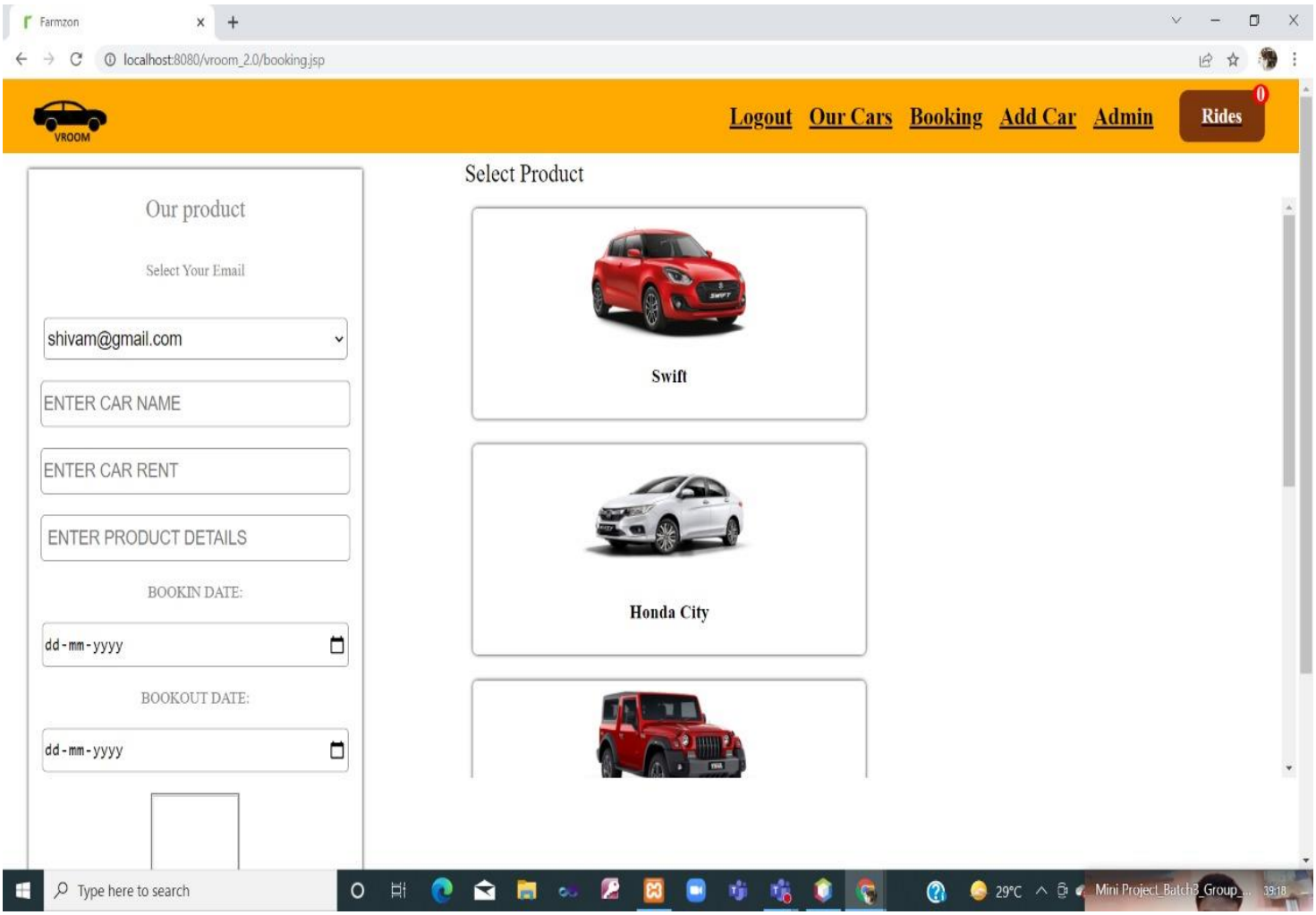
7 Payment gateway

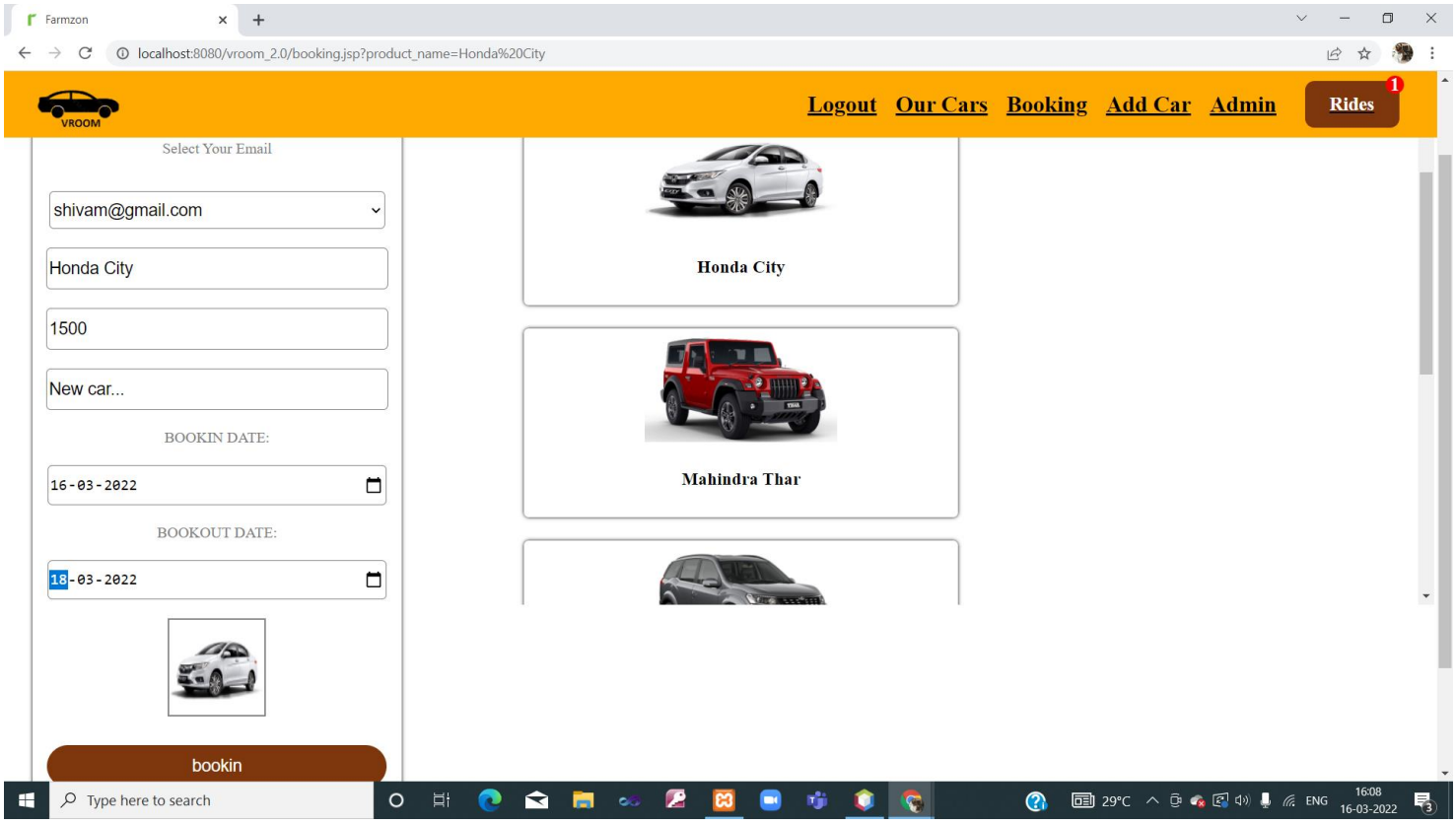
Test Drive :-

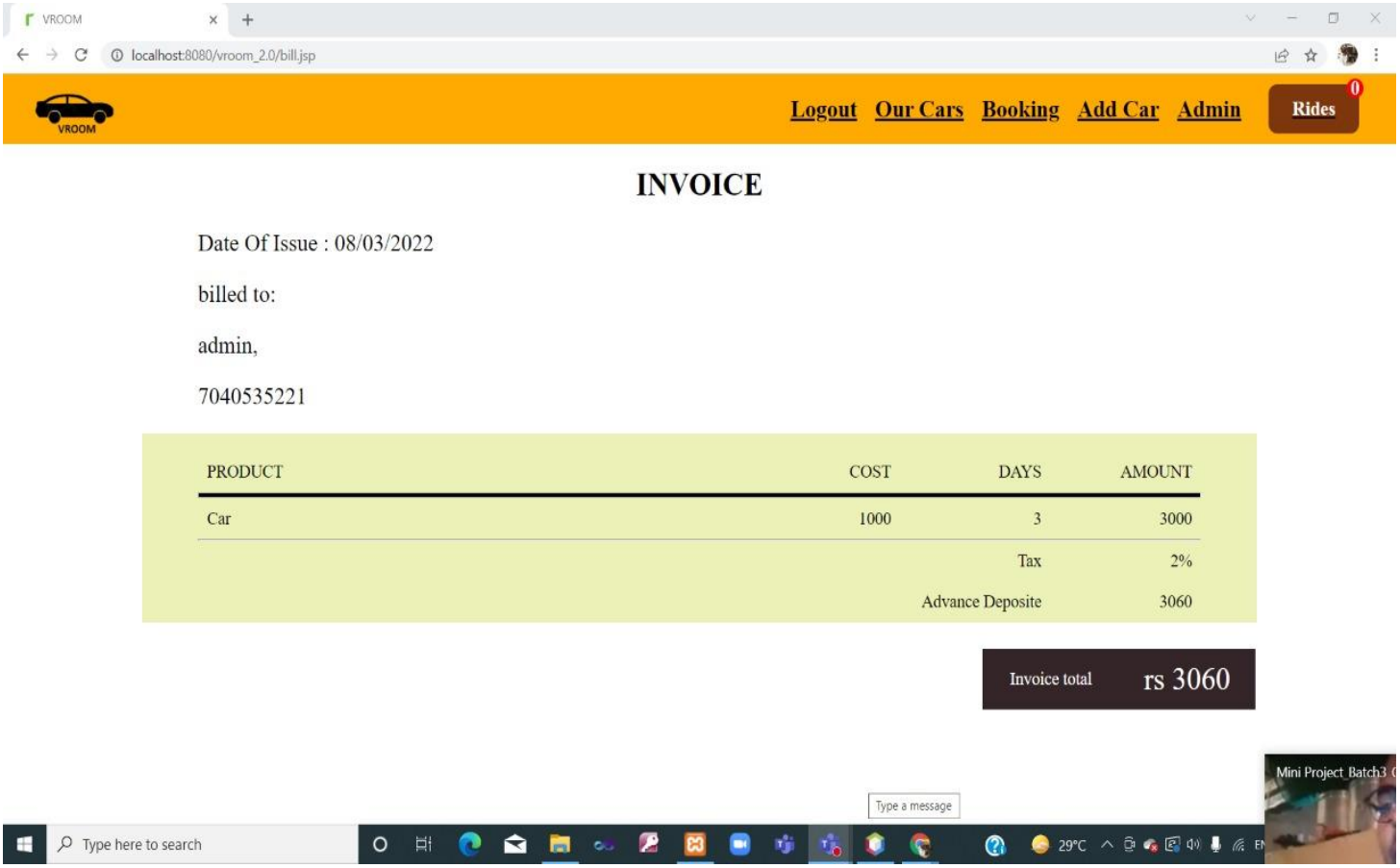

VROOM
localhost:8080/vroom_2.0/product-gallery.jsp?type=12
VROOM
Logout
Our Cars
Booking
Add Car
Admin
Rides
0
Difficult roads often leads to beautiful destination.
Our cars
Swift
$ 1000.00
Take a Ride
Honda City
$ 1500.00
Take a Ride
Mahindra Thar
$ 2000.00
Mahindra-XUV500
$ 3000.00
Have a complaint? report it by mail or call us at +911234567890. Want to know about us ?
localhost:8080/vroom_2.0/product-gallery.jsp?type=12
Type here to search
29°C
Mini Project_Batch3_Group_...
38:52

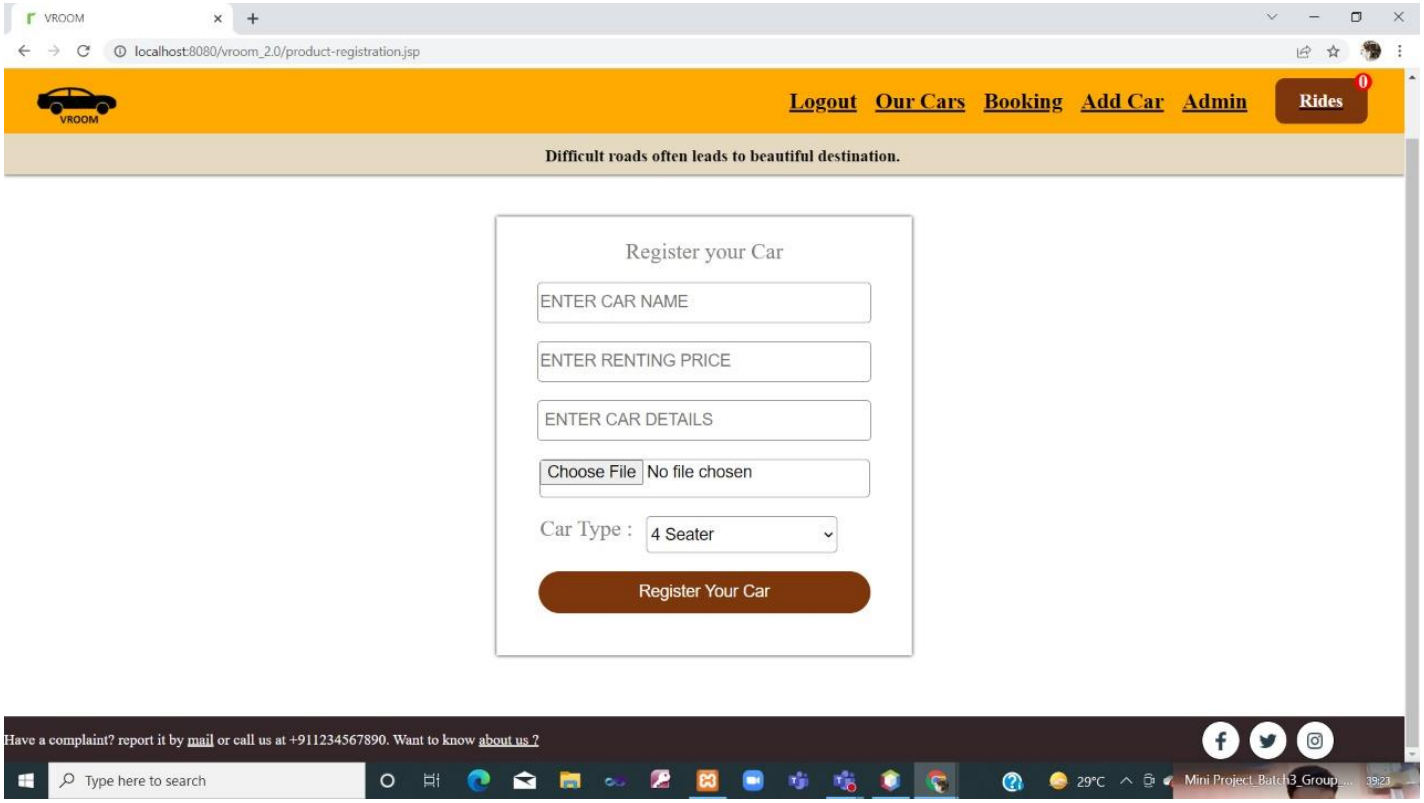
Car Ride Section :-

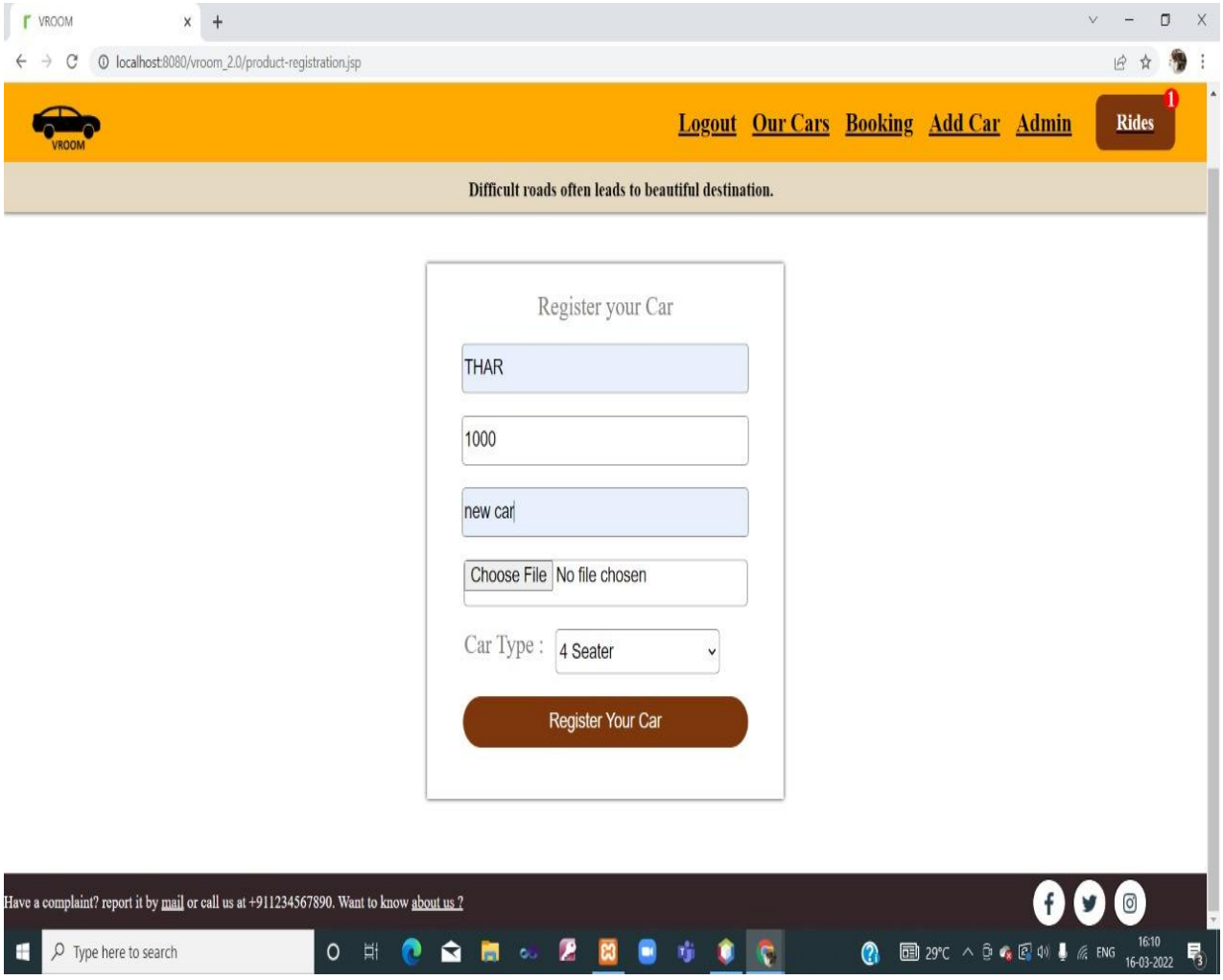


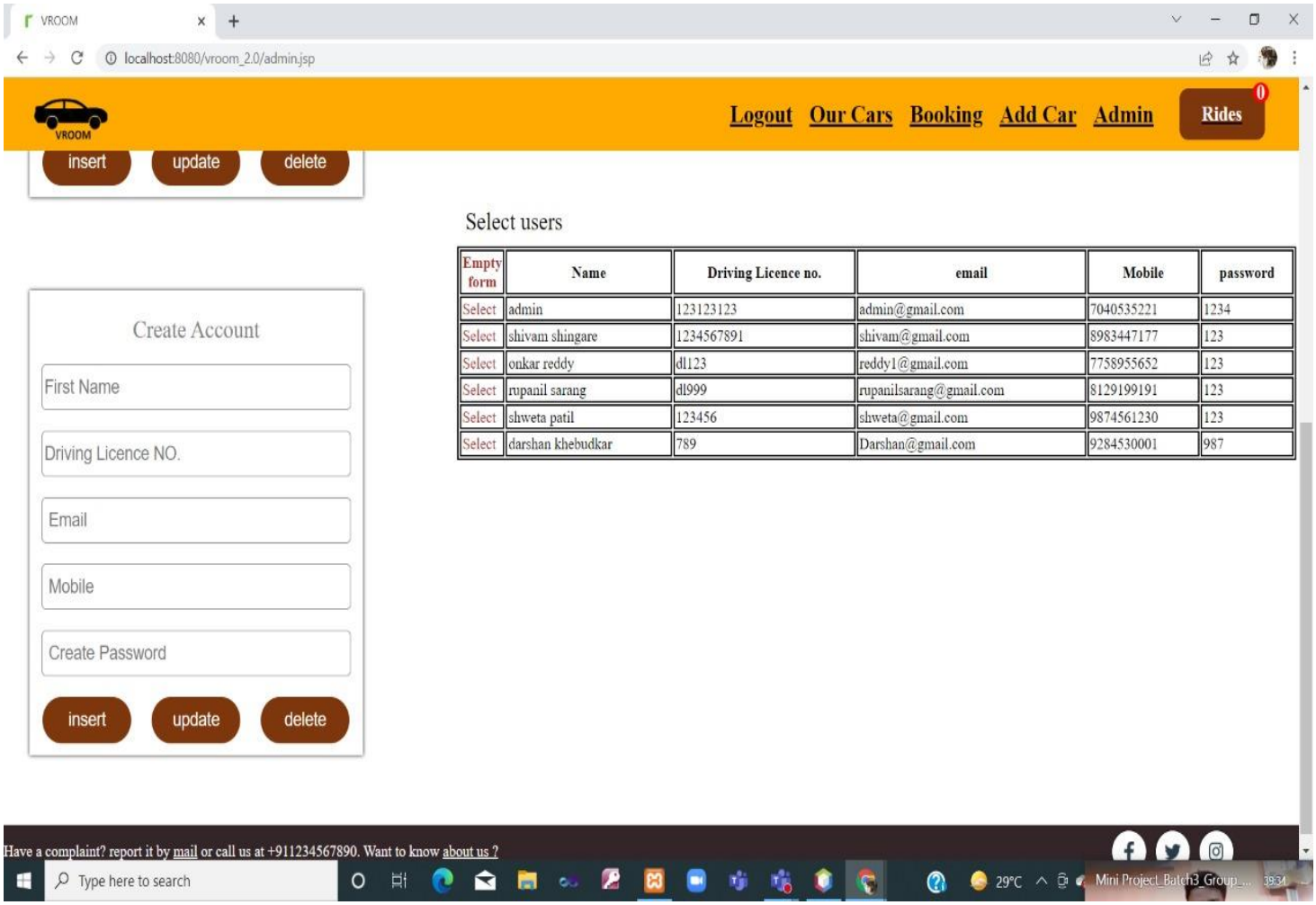

Farmzon
localhost:8080/vroom_2.0/booking.jsp
VROOM
Logout
Our Cars
Booking
Add Car
Admin
Rides
0
Our product
Select Your Email
shivam@gmail.com
ENTER CAR NAME
ENTER CAR RENT
ENTER PRODUCT DETAILS
BOOKIN DATE:
dd-mm-yyyy
BOOKOUT DATE:
dd-mm-yyyy
Select Product
Swift
Honda City
Type here to search
29°C

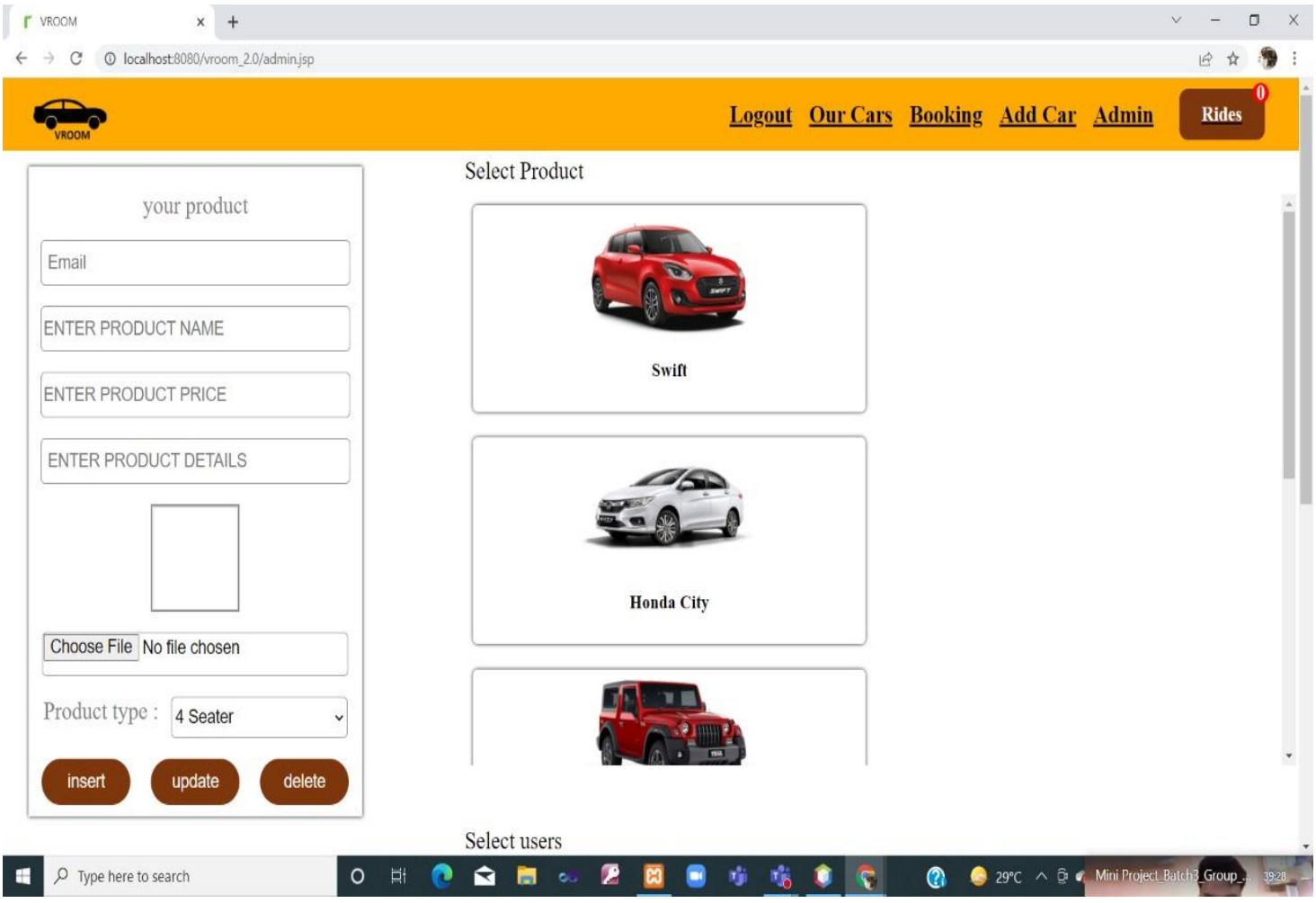

Farmzon
localhost:8080/vroom_2.0/booking.jsp?product_name=Honda%20City
VROOM
Logout
Our Cars
Booking
Add Car
Admin
Rides
1
Select Your Email
shivam@gmail.com
Honda City
1500
New car...
BOOKIN DATE:
16-03-2022
BOOKOUT DATE:
18-03-2022
bookin
Honda City
Mahindra Thar
Type here to search
29°C
ENG
16:08
16-03-2022


VROOM
localhost:8080/vroom_2.0/bill.jsp
VROOM
Logout
Our Cars
Booking
Add Car
Admin
Rides
0
INVOICE
Date Of Issue : 08/03/2022
billed to:
admin,
7040535221
PRODUCT
COST
DAYS
AMOUNT
Car
1000
3
3000
Tax
2%
Advance Deposite
3060
Invoice total
rs 3060
Mini Project_Batch3
Type a message
Type here to search
29°C


VROOM
localhost:8080/vroom_2.0/product-registration.jsp
VROOM
Logout
Our Cars
Booking
Add Car
Admin
Rides
0
Difficult roads often leads to beautiful destination.
Register your Car
ENTER CAR NAME
ENTER RENTING PRICE
ENTER CAR DETAILS
Choose File
No file chosen
Car Type :
4 Seater
Register Your Car
Have a complaint? report it by mail or call us at +911234567890. Want to know about us ?
Type here to search
29°C
Mini Project_Batch3_Group....


VROOM
localhost:8080/vroom_2.0/product-registration.jsp
VROOM
Logout
Our Cars
Booking
Add Car
Admin
Rides
1
Difficult roads often leads to beautiful destination.
Register your Car
THAR
1000
new car
Choose File
No file chosen
Car Type :
4 Seater
Register Your Car
Have a complaint? report it by mail or call us at +911234567890. Want to know about us ?
Type here to search
29°C
ENG
16:10
16-03-2022


VROOM
localhost:8080/vroom_2.0/admin.jsp
VROOM
Logout
Our Cars
Booking
Add Car
Admin
Rides
0
insert
update
delete
Select users
Empty form
Name
Driving Licence no.
email
Mobile
password
Select admin 123123123 admin@gmail.com 7040535221 1234
Select shivam shingare 1234567891 shivam@gmail.com 8983447177 123
Select onkar reddy dl123 reddy1@gmail.com 7758955652 123
Select rupanil sarang dl999 rupanilsarang@gmail.com 8129199191 123
Select shweta patil 123456 shweta@gmail.com 9874561230 123
Select darshan khebudkar 789 Darshan@gmail.com 9284530001 987
Create Account
First Name
Driving Licence NO.
Email
Mobile
Create Password
insert
update
delete
Have a complaint? report it by mail or call us at +911234567890. Want to know about us ?
Type here to search
29°C
Mini Project_Batch3_Group_...


VROOM
localhost:8080/vroom_2.0/admin.jsp
VROOM
Logout
Our Cars
Booking
Add Car
Admin
Rides
0
your product
Email
ENTER PRODUCT NAME
ENTER PRODUCT PRICE
ENTER PRODUCT DETAILS
Choose File
No file chosen
Product type :
4 Seater
insert
update
delete
Select Product
Swift
Honda City
Select users
Type here to search
29°C
Mini Project_Batch3_Group_...

➢ CONCLUSION :

Car rental business has emerged with a new goodies compared to the past experience where every activity concerning car rental business is limited to a physical location only. Even though the physical location has not been totally eradicated; the nature of functions and how these functions are achieved has been reshaped by the power of internet. Nowadays, customers can reserve cars online, rent car online, and have the car brought to their door step once the customer is a registered member or go to the office to pick the car.

The web based car rental system has offered an advantage to both customers as well as Car Rental Company to efficiently and effectively manage the business and satisfies customers' need at the click of a button

POST IMPLEMENTATION :-

The website application is self-maintained.

The project support already multiple Car.

There is no need provide post implementation support.

The admin can access add, edit, delete process.

FUTURE ENHANCEMENT :-

Add new car is represent the car list.

The User payment for the current receipt of the payment.

Add the current project for booking easy.

Source Code:-

```
 <%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
        <%@ page import = "java.sql.*"%>
<%@ page import = "Connector.Connector"%>
    <%
//     try{
    Cookie[] c =request.getCookies();
    String logged="false";
    String email;
             ResultSet rs;
            Connector db = new Connector();
            Connection con =Connector.conn();
            Statement st = con.createStatement();
            %>
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
```

```
    <link rel="shortcut icon" href="./images/favicon.ico" type="image/x-icon">
    <title>Farmzon</title>
    <link rel="stylesheet" href="css/style.css">
</head>
<body>
        <header>
        <div class="left_header">
            <a href="./index.jsp"><div class="img1"></div></a>
            <form >
            <input type="text" name="search" id="" list="search" placeholder="      Search for product">
            <datalist id ="search"><%
            ResultSet rs2 = st.executeQuery("select * from product_registration");
             while(rs2.next()){%>
                                <option value="<%=rs2.getString("product_name")%>">
             <%}%>
            </datalist>
            </form>
        </div>
        <div class="right_header">
            <ul>
                <%
```

```
                    email=c[2].getValue();
                    rs= st.executeQuery("select * from registration where email='"+email+"'");
                    rs.next();
                String fname=rs.getString("fname");
                if(fname.equals("admin")){%>
                    <li><a href="./admin.jsp">Admin</a></li>
                <%}
}
                catch(Exception e){}%>
            <li><a href="./cart.jsp">
                <div class="basket">
                    <div style="display: flex;">
                    <img src="./images/cart.svg" alt="">
                    <h5>Basket</h5>
                    <div class="cart_counter">
                    <%try{
                    rs= st.executeQuery("select * from cart where email='"+c[2].getValue()+"'");
                    }
                    catch(Exception e){
                      rs= st.executeQuery("select * from cart where email='');
                    }
int overall_quantity=0;
```

```
while(rs.next()){
            overall_quantity= overall_quantity+rs.getInt("quantity");
}
out.println(overall_quantity);
      %>


                  </div>
                </div>
              </div>
            </a>
            </li>
            </ul>
      </div>
</header>
      <div class="last-second ls">
      <!-- <a href="mailto:webmaster@example.com">Jon Doe</a> -->
      <div class="last-second-left">
        <p style="margin-top:25px ;"><b> We are the students of the New College kolhapur.This is our final year project.</b></p>
      </div>
      <div class="last-second-right lsr">
      </div>
   </div>
```

```
<div class="sec1">
    <img
src="./images/59d54d9065597f0001129e43_TheTeachersGuild_Logo_Primary_MoreBackground-
01.png" id="icon"
        alt="">
    <h1>Farmzon is the revolution, farmers has been waiting for.</h1>
    <p>Making our website to solve problem of farmers</p>
</div>
<div class="sec2">
    <img src="" alt="" width="100%">
    <div class="img_overlay">
        <h1>Welcome to Farmzon</h1>
        <p>We are students that tried to solve the problem of
          farmers and small farming buisness. In our project we introduce the ecommerce website for
farmers, where we sell the essentials farming products. It helps farmers by saving time, money and
efforts.</p>
        <a href="./index.jsp" style="text-decoration: none;"><button>TO OUR WEBSITE</button></a>
    </div>
</div>
<div class="last-second">
    <div class="last-second-left">
        <p style="margin-top:0 ;">In carrying out e-commerce, the most important thing is to keep doing
what you are doing right now with passion, to keep it up.</p>
```

Admin :-

```
 <%@ page import = "java.io.*,java.util.*, javax.servlet.*" %>

<%@ page import = "javax.servlet.http.*" %>

<%@ page import = "org.apache.commons.fileupload.*" %>

<%@ page import = "org.apache.commons.fileupload.disk.*" %>

<%@ page import = "org.apache.commons.fileupload.servlet.*" %>

<%@ page import = "org.apache.commons.io.output.*" %>

<%@page import="javax.servlet.http.Part" %>

<%@page import="java.util.Collection"%>

<%@ page import = "java.sql.*"%>

<%@ page import = "Connector.Connector"%>

<%


String product_name = null;

Part part = null;

String product_price = null;

String product_details = null;

String product_type = null;

String image_name=null;

String email=null;
```

```
String submit=null;
String image=null;
try{
image=request.getParameter("image_name");
}catch(Exception e){
        out.println(e);
}
%>
<%
  File file ;
  int maxFileSize = 5000 * 1024;
  int maxMemSize = 5000 * 1024;
  ServletContext context = pageContext.getServletContext();
  String filePath = "C:/Users/ASUS/eclipse-workspace/Farmzone/WebContent/images/product_images/";

  // Verify the content type
  String contentType = request.getContentType();

  if ((contentType.indexOf("multipart/form-data") >= 0)) {
    DiskFileItemFactory factory = new DiskFileItemFactory();
    // maximum size that will be stored in memory
    factory.setSizeThreshold(maxMemSize);
```

```
// Location to save data that is larger than maxMemSize.
factory.setRepository(new File("C:/Users/ASUS/eclipse-workspace/Farmzone/WebContent/temp"));

// Create a new file upload handler
ServletFileUpload upload = new ServletFileUpload(factory);

// maximum file size to be uploaded.
upload.setSizeMax( maxFileSize );

try {
   // Parse the request to get file items.
   List fileItems = upload.parseRequest(request);

   // Process the uploaded file items
   Iterator i = fileItems.iterator();

   out.println("<html>");
   out.println("<head>");
   out.println("<title>JSP File upload</title>");
   out.println("</head>");
   out.println("<body>");
```

```
        while ( i.hasNext () ) {
          FileItem fi = (FileItem)i.next();
          if ( !fi.isFormField () ) {
           try{
            // Get the uploaded file parameters
            String fieldName = fi.getFieldName();
            String fileName = fi.getName();
            boolean isInMemory = fi.isInMemory();
            long sizeInBytes = fi.getSize();
            // Write the file
            if( fileName.lastIndexOf("\\") >= 0 ) {
              file = new File( filePath +
              fileName.substring( fileName.lastIndexOf("\\"))) ;
            } else {
              file = new File( filePath +
              fileName.substring(fileName.lastIndexOf("\\")+1)) ;
//              out.println(fileName+"----------------");
            }
            image_name=fileName;
            fi.write( file ) ;
           }catch(Exception e){image_name=image;}
```

```
//              out.println("Uploaded Filename: " + filePath +
//              fileName + "<br>");
            }
            else{
             String fieldname = fi.getFieldName();
               String fieldvalue = fi.getString();
               if (fieldname.equals("product_name")) {
                  //logic goes here...
                  product_name= fieldvalue;
               } else if (fieldname.equals("product_price")) {
                        product_price= fieldvalue;
               }else if (fieldname.equals("product_details")) {
                        product_details= fieldvalue;
               }
               else if (fieldname.equals("product_type")) {
                        product_type= fieldvalue;
//                      out.println(product_type+"++++++++++++++++++++");
               }else if (fieldname.equals("email")){
                        email= fieldvalue;

//                      response.sendRedirect("./admin.jsp");
//                                                  submit=request.getParameter("submit");
```

```
            // Write the file
            if( fileName.lastIndexOf("\\") >= 0 ) {
              file = new File( filePath +
              fileName.substring( fileName.lastIndexOf("\\"))) ;
            } else {
              file = new File( filePath +
              fileName.substring(fileName.lastIndexOf("\\")+1)) ;
//              out.println(fileName+"----------------");
            }
            image_name=fileName;
            fi.write( file ) ;
           }catch(Exception e){image_name=image;}
//              out.println("Uploaded Filename: " + filePath +
//              fileName + "<br>");
          }
          else{
           String fieldname = fi.getFieldName();
             String fieldvalue = fi.getString();
             if (fieldname.equals("product_name")) {
                //logic goes here...
                product_name= fieldvalue;
             } else if (fieldname.equals("product_price")) {
```

```
                product_price= fieldvalue;
            }else if (fieldname.equals("bookin")) {
                bookin= fieldvalue;
            }else if (fieldname.equals("bookout")) {
                bookout= fieldvalue;
            }else if (fieldname.equals("product_details")) {
                product_details= fieldvalue;
            }
            else if (fieldname.equals("email")){
                email= fieldvalue;

//                  response.sendRedirect("./admin.jsp");
//                                                  submit=request.getParameter("submit");
            }
            else if (fieldname.equals("submit")){
                submit= fieldvalue;
//                  out.println(submit+"***************");
           }


        }
```

```
        }
        out.println("</body>");
        out.println("</html>");
      } catch(Exception ex) {
        System.out.println(ex);
      }
    } else {
      out.println("<html>");
      out.println("<head>");
      out.println("<title>Servlet upload</title>");
      out.println("</head>");
      out.println("<body>");
      out.println("<p>No file uploaded</p>");
      out.println("</body>");
      out.println("</html>");
    }
%>
<%
try{
Connection con=null;
String url="jdbc:mysql://localhost:3306/vroom";
try {
```

```
Class.forName("com.mysql.jdbc.Driver");
con = DriverManager.getConnection(url,"root","");
}
catch(Exception e) {


}
if(submit.equals("bookin")){
PreparedStatement ps =con.prepareStatement("insert into booking values(?,?,?,?,?,?)");
out.println();
ps.setString(1,email);
ps.setString(2,product_name);
ps.setString(3,product_price);
ps.setString(4,bookin);
ps.setString(5,bookout);
ps.setString(6,"0");//0 for book out
ps.executeUpdate();


ps =con.prepareStatement("update product_registration set flag=? where
product_name='"+product_name+"'");
        out.println();
        ps.setString(1,"0");
        ps.executeUpdate();
        out.println("updated");
```

```
Cookie c5 = new Cookie("car",product_name);
                    Cookie c6 = new Cookie("car_price",product_price);
              response.addCookie(c5);
                    response.addCookie(c6);
response.sendRedirect("./bill.jsp");
con.close();
}

else if(submit.equals("bookout")){
        PreparedStatement ps =con.prepareStatement("delete from booking where email='"+email+"'");
        ps.executeUpdate();
        out.println("deleted");
    ps =con.prepareStatement("update product_registration set flag=? where product_name='"+product_name+"'");
        out.println();
        ps.setString(1,"1");
        ps.executeUpdate();
        out.println("updated");
        response.sendRedirect("./booking.jsp");
        con.close();
        }
}
catch(Exception e){
```

Implementation and Maintenance:

The goal of the coding phase is to translate the design into code in the given programming language. The coding steps translate the detailed design of the system into programming language. The translation process continues when complier accepts source code as input and produces machine dependent object code as output. Linking of object files are done to produce the machine code. Internaldocumentation is another important factor, to facilitate other to understand the code and the logic

Module Specification:

The modules specified in the design are implemented using various ".html", "jsp" and "class" files. These files in the source code shares the common routines and share the data structure, to establish thehierarchical relationship

Compilation and Building the executable:

The source code for the system organized in various files is compiled using the "java" utility providedin the JAVA. The application is made to run in web browser the address as "http://localhost:808 1/staff" present in ROOT directory of Tomcat Server.

Java:

Java is a computer programming language that is concurrent, class-based, object- oriented, and specifically designed to have as few implementation dependencies as possible. It is intended to let application developers "write once, run anywhere" (WORA), meaning that code that runs on one platform does not need to be recompiled to run on another. Java applications are typically compiled to byte code (class file) that can run on any Java virtual machine (JVM) regardless of computer architecture. Java is, as of 2014, one of the most popular programming languages in use, particularly for client- server web applications, with a reported 9 million developers. Java was originally developedby James Gosling at Sun Microsystems (which has since merged into Oracle Corporation) and releasedin 1995 as a core component of Sun Microsystems' Java platform. The language derives much of its syntax from C and C++, but it has fewer low- level facilities than either of them.

The original and reference implementation Java compilers, virtual machines, and class libraries weredeveloped by Sun from 1991 and first released in 1995.As of May 2007, in compliance with the specifications of the Java Community Process, Sun relicensed most of its Java technologies under theGNU. Others have also developed alternative implementations of these Sun technologies, such as the GNU Compiler for Java (byte code compiler), GNU Class path (standard libraries),and Iced Tea-Web(browser plug in for applets).

Advantages of java:

- Purely Object oriented.
- Platform independent.
- It is dynamic, simple and robust.
- Easy to learn.
- Multithreaded. Secure.
- Wide variety of Application Programmer Interfaces (APIS).
- Excellent networking capability.

The java Platform:

The Java platform is the name given to the computing platform from Oracle that helps users to run and develop Java applications. The platform does not just enable a user to run and develop Java application, but also features a wide variety of tools that can help developers work efficiently with theJava programming language

The platform consists of two essential software's:

- The Java Runtime Environment (JRE), which is needed to run Java applications and applets
- The Java Development Kit (JDK), which is needed to develop those Java applications and applets. If you have installed the JDK, you should know that it comes equipped with a JRE aswell. So, for all the purposes of this book, you would only require the JDK.

Java Components:

Java has two components those are

1. Java virtual machine (JVM).

2. Java Application Programmers Interface (API).

JVM

A Java virtual machine (JVM) interprets compiled Java binary code (called byte code) for a computer's processor (or "hardware platform") so that it can perform a Java program's instructions. Java was designed to allow application programs to be built that could be run on any platform withouthaving to be rewritten or recompiled by the programmer for each separate platform. A Java virtual machine makes this possible because it is aware of the specific instruction lengths and other particularities of the platform

API-

An application programming interface (API) is a library of functions that Java provides for programmers for common tasks like file transfer, networking, and data structures.

- Java Program
- Java API
- Java Virtual Machine
- Hardware-Based Platform

Java in web:

Java covers the whole application form server to client and back again, it provides many powerful technologies, it can be used to extend the browser, and it provides good security system. HTML: HTML stands for hypertext markup Language. It is very useful to make web pages and very easy to learn. Hypertext Markup file is a text file containing small markup tags. These marks up tags tell the browser how to display a web page. It has two types of extensions one is html and second is html but both are used for html web pages. For hypertext markup language you can use the simple text editor for example; use notepad for writing your HTML code in the windows. If you are using Mac you can use simple text editor. HTML uses approach of what you see is what you get. You can also use to writetags other software that is FrontPage and Dreamweaver. In HTML character are surrounded by the tags. HTML tags come in pair. The beauty of this language is that it is not case sensitive. Every web page need HTML with it you cannot make the good web pages. And it is the base for every web page and used to display the text in the web pages there are some other latest version of HTML like DHTML which stands for dynamic html and is used to make the web pages more interactive

Features of HTML:

- It is simple to understand and implement.
- HTML constructs are very easy to comprehend, and can be used effectively by anybody.
- HTML syntax is a worldwide standard.
- The methodology used by HTML to markup information is independent of its representationon a particular hardware or software architecture.
- It is not a programming language.
- And it is also not a description language

How isp works?

JSP pages exist in 3 forms or versions

- JSP source code consists of text file with an extension of jsp and contains a mix of HTML template code, Java language statements and JSP directives and actions that describe how togenerate a web page to service a particular request.
- Java source code: the jsp container translates the jsp source code into the source code for anequivalent Java Servlet as needed.
- Compiled Java class: Like any other Java class, the generated servlet code is compiled intobyte-codes in a .class file ready to be loaded and executed.

Java Script:

What is Java Script?

- Java Script is embedded into html.
- It is browser dependent.
- JavaScript depends on the web browser to support it. If the browser doesn't support it, JavaScript code will be ignored. Internet Explorer 3.0 and Netscape Navigator 2.0 onwardssupport JavaScript.
- It is an interpreted language, loosely typed, object based language.
- Java script is not Java

Data Validation:

JavaScript provides the means for basic data validation before it is sent to the server. Whether the values entered are correct or not or whether all the fields in a form are filled out or not can be checkedbefore sending data to web server, if JavaScript is not used t hen data is sent to web server, and the web server would response with a message that the data sent to it is incorrect or incomplete Thus JavaScript ensures data validation and also reduces the network traffic.

scope of the Mini Project:

- We can directly prepare a resume and upload it into the system instead of uploading separately.
- We can upload placement papers so that students can solve those and get to know the scoresalso.
- We can add a message/ E-mail system so that a placement officer and the company cancommunicate over the mail.

➢ BIBLIOGRAPHY

Here I would like to mention about the sources of information in due course of writing the project report & would like to state that the information obtained through different presentation & projects of seniors has greatly contributed to the successful completion of the project.

References:

- Herbert Schildt "Java 2-The Complete Reference
- Phill Hann "JSP-The Complete Reference"
- "Leam Java in 21 days "by SAM's publications
- Software Engineering by Roger s. Pressman
- J2EE Bible By James McGovern

Websites:

- http://Java .sun.com/j2ee/fag/html
- http://Java.sun.com/products/jdbe/reference/faqs/index html
- http://www.apt.jhu.edu/-hall/java/servlet- Tutorial